

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A data transfer apparatus for transferring data between a first network and a second network, said data transfer apparatus comprising:

storage means for storing data separately for each data flow which has been received from said first network and which is to be transferred to said second network, the second network having a non-coincident bus cycle with respect to the first network;

detection means for detecting the degree of non-coincidence between said first and second network and amount of data stored in said storage means, for each data flow; and

control means for controlling said data transferred to said second network in accordance with a detection result provided by said detection means.

Claim 2 (Original); A data transfer apparatus according to Claim 1, wherein said first network and said second network are a wide area digital network and an IEEE-1394 serial bus, respectively.

Claim 3 (Original): A data transfer apparatus according to Claim 1, wherein said control means starts reading said data from said storage means after the amount of data stored in said storage means has become equal to or greater than a predetermined threshold value.

Claim 4 (Original): A data transfer apparatus according to Claim 1, wherein when the amount of data stored in said storage means has become equal to or greater than a

predetermined threshold value, said control means discards dummy data included in said data stored in said storage means.

Claim 5 (Original): A data transfer apparatus according to Claim 1, wherein when the amount of data stored in said storage means has become equal to or greater than a predetermined threshold value, said control means inserts dummy data into said data to be transferred to said second network.

Claim 6 (Currently Amended): A data transfer apparatus according to Claim 1, wherein when said control means discards dummy data from said data stored in said storage means or inserts dummy data into the data to be transferred to said second network, said control means gradually corrects a deviation of a time stamp included in said data over a predetermined period of data units.

Claim 7 (Currently Amended): A data transfer apparatus according to Claim 6, wherein said control means inserts or discards said dummy data at a substantially middle point of said period of data units during which the time stamp is corrected.

Claim 8 (Original): A data transfer apparatus according to Claim 1, wherein said first network is connected to another first network which is not synchronous in terms of a network clock with the former first network.

Claim 9 (Original): A data transfer apparatus according to Claim 1, wherein said data is video data or audio data including a temporally continuous content.

Claim 10 (Currently Amended): A data transfer method for transferring data between a first network and a second network, said method comprising the steps of:

controlling the operation of storing data separately for each data flow which has been received from said first network and which is to be transferred to said second network, the second network having a non-coincident bus cycle with respect to the first network;

detecting the degree of non-coincidence between said first and second network and amount of data stored in said storage control step, for each data flow; and

controlling the operation of transferring said data to said second network in accordance with a detection result obtained in said detection step.

Claim 11 (Currently Amended): A storage medium on which a computer-readable program for controlling a data transfer apparatus for transferring data between a first network and a second network is stored, said program comprising the steps of:

controlling the operation of storing data separately for each data flow which has been received from said first network and which is to be transferred to said second network, the second network having a non-coincident bus cycle with respect to the first network;

detecting the degree of non-coincidence between said first and second network and amount of data stored in said storage control step, for each data flow; and

controlling the operation of transferring said data to said second network in accordance with a detection result obtained in said detection step.

Claim 12 (Currently Amended): A data transfer apparatus for transferring data between a first network and a second network, said data transfer apparatus comprising:

a memory configured to store data separately for each data flow which has been received from said first network and which is to be transferred to said second network, the second network having a non-coincident bus cycle with respect to the first network;

a detector configured to detect the degree of non-coincidence between said first and second network and amount of data stored in said memory, for each data flow; and

a controller configured to control said data transferred to said second network in accordance with a detection result provided by said detector.

Claim 13 (Previously Presented): The data transfer apparatus of Claim 1, wherein the detection result includes a determination as to a temporal difference between a bus cycle of said first network relative to a bus cycle of said second network.

Claim 14 (Previously Presented): The data transfer apparatus of Claim 10, wherein the detection result includes a determination as to a temporal difference between a bus cycle of said first network relative to a bus cycle of said second network.

Claim 15 (Previously Presented): The data transfer apparatus of Claim 11, wherein the detection result includes a determination as to a temporal difference between a bus cycle of said first network relative to a bus cycle of said second network.

Claim 16 (Previously Presented): The data transfer apparatus of Claim 12, wherein the detection result includes a determination as to a temporal difference between a bus cycle of said first network relative to a bus cycle of said second network.